REMARKS

Continued examination and entry of the foregoing and reconsideration of the subject application are respectfully requested in light of the amendments above and the comments which follow.

As correctly noted in the Office Action Summary, claims 1-3 and 5-9 were pending. By the present response, claims 1, 8 and 9 have been amended. Thus, upon entry of the present response, claims 1-3 and 5-9 remain pending and await further consideration on the merits.

Support for the foregoing amendments can be found, for example, in at least the following locations in the original disclosure: the original claims and the specification, page 7, lines 1-3.

EXAMINER INTERVIEW

Applicants appreciate the time afforded by the Examiner and his supervisor in the telephonic interview of March 24, 2005. During the interview, the references of record were discussed as well as the present application, including the claims as they have been amended herein.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

Claims 1-3 and 5-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,297,951 to Asai (hereafter "*Asai*") in view of U.S. Patent No. 5,731,014 to Travaglini (hereafter "*Travaglini*") on the grounds set forth in paragraph 3 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

The present application discloses an ejector arrangement in an injector mould. With reference to the exemplary embodiment depicted in Figure 1a, the ejector arrangement comprises ejectors 7, which are received in ducts 3. Figure 1a and the discussion of this embodiment on pages 6-8 of the specification disclose, the ducts extend from the cavity 4, through to the rear side 5 of the mould half 2a and then continue through the locking plate 21 in the form of through ducts 22. In the exemplary embodiment depicted in Figure 1a, the ducts 22 are arranged concentrically in both the mould half 2a and the locking plate 21 so that press pins 31 on the pressure plate travel in the ducts 22 through the locking plate 21 and into contact with the ejectors 7. With this arrangement, the press pins 31 may engage the ejectors 7 without an intermediary connection plate or other connecting means.

As disclosed in the application, the above noted arrangement, and other disclosed arrangements, allow for significant reduction in problems related to moulds, such as pressure related elastic deformation and deflection of the mould half (page 3, lines 25-28). In one exemplary embodiment, a recess or inner cavity typical in conventional designs can be eliminated, and the thicknesses of wall portions behind the cavity can be optimized (page 3, lines 28-31). The disclosed improvements, either alone or in combination, variously result in, e.g., increased dimensional correctness of components (page 3, lines 35-36) and a more uniform contact pressure between the component and the cavity (page 4, lines 1-2) producing a better and more precise cast of the surface texture of the cavity, simplifying the process of fitting the mould, and resulting in components of improved quality, thinner wall thickness and lower unit cost per component produced (page 4, lines 3-7).

The above features and advantages are generally embodied in Applicant's claims.

For example, amended claim 1 recites that an injection mould has, *inter alia*, an ejector arrangement comprising ejectors and a pressure plate for actuating the ejectors. The ejectors are received in ducts. The ducts are formed in a first of said mould halves and extend from a cavity arranged in the mould and through a locking plate. The pressure plate has press pins concentrically arranged with the ducts in the locking plate and the mould half and which engage the ejectors and press the ejectors into the cavity.

In another example, amended claim 8 recites that an ejector arrangement in an injector mould comprises, *inter alia*, ejectors to eject a component formed in the mould. The ejectors are in ducts formed in a first of said mould halves and extending from a cavity arranged in the mould through the locking plate. The pressure plate has press pins which are concentrically arranged with the ducts in the locking plate and the mould half and engage the ejectors and press the ejectors into the cavity.

In a still further example, amended claim 9 recites that an injection mould comprises, *inter alia*, a mould module, an ejector module, a module comprising a locking plate, and a module comprising a pressure plate. Ejectors, located in ducts formed in the mould module and the ejector module and extending from a cavity arranged in the mould and through the locking plate, are in their non-actuated state essentially received in the ducts. The pressure plate has press pins concentrically arranged with the ducts in the locking plate and the mould half, and which engage the ejectors and press the ejectors into the cavity.

These rejections should be withdrawn because a prima facie case of obviousness has not been established. To establish a prima facie case of obviousness, three criteria must be meet including establishing a suggestion or motivation to modify the reference or to combine the teachings, establishing a reasonable expectation of success for the proposed modification or combination, and showing that the references teach or suggest all of the claimed features. See, MPEP §2142-43. Here, the rejection is deficient in that the references do not show, teach or suggest all of the claimed features.

The claims recite the following distinguishing features, among others.

The independent claims each recite that the mould has ducts for the ejector pins. The claimed ducts extend from a cavity arranged in the mould and through a locking plate. In contrast, *Asai* discloses an ejection bar 7 and a punch 6 (which is not an ejector). Ejector bar 7 travels in through-hole 27 in the mold half, and a larger diameter portion 7A travels in guide chamber 28 (col. 2, lines 51-56). The guide chamber is a recess in the mold constituting member 26. Neither the through-hole 27 or the guide chamber 28 (e.g., the ducts for the ejector arrangement in *Asai*) pass "through a locking plate." Rather, and as seen in Fig. 1, the locking plate of Asia (extreme left hand side plate) actually stops the ejector bar 7 and larger diameter portion 7A from traveling. Thus, this element is completely missing from *Asia*.

Second, the independent claims each recite that the mould has a pressure plate with press pins that engage the ejectors. The claimed press pins are concentrically arranged with the ducts in the locking plate and the mould half. In contrast, the ejector arrangement in *Asai* continues with ejector pins 9A, which press on the larger diameter portion 7A. However, these ejector pins 9A are not located

concentrically with the through-hole 27 or the guide chamber 28 in *Asia*. Rather, pin 9B, which interfaces with the punch 6 is located concentrically with the through-hole 27 or the guide chamber 28 in *Asia*. Thus, this element is also completely missing from *Asia*.

Finally, the disclosure in *Travaglini* does not contribute to overcome the above noted missing elements in *Asai*. In fact, these same elements are also missing from *Travaglini*. For example and with reference to Fig. 2a, *Travaglini* discloses a mold with ejector pins 30 operating in cylindrical apertures 32 that extend between the first mold face 20 and an ejector plate recess 36. Thus, *Travaglini* itself states that the cylindrical apertures 32 (e.g., the ducts) only extend to the recess and not through the locking plate as presently claimed. Further, and to the extent that knock-out rods 25 can be considered to be in ducts, Applicants respectfully note that the knock-out rods are not located concentrically with the cylindrical apertures 32 in *Travaglini*, and therefore, this element is also missing from the disclosure in *Travaglini*.

Based on at least the above reasons, it is respectfully submitted that a prima facie case of obviousness has not been established against the present independent claims because the disclosures in *Asai* and *Travaglini*, whether considered alone or in combination, do not disclose, teach or suggest all of the elements of the independent claims. Further, obviousness has not been established against the dependent claims for at least the same reasons. Accordingly, withdrawal of the rejection is respectfully requested.

CONCLUSION

From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

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